

should not be used for UTI is moxifloxacin, which is indicated for respiratory infections, because treatment results in low levels of the drug in the urinary tract.

A single dose of fosfomycin is another alternative, but is considered a second-line treatment because the efficacy is not that high and it is expensive.

One benefit, however, is that resistance to this agent appears to be low, Dr. Brown said.

Short-course treatment is not appropriate for complicated cystitis, which should be treated with a 7-day course of therapy, she said. Culture all patients, and

adjust treatment based on susceptibility data, she said.

As many as 25% of women with acute cystitis can develop frequent, recurrent UTIs, which are reinfections, not relapses. (Fewer than 5% of these women have a correctable structural or functional abnormality of the urinary tract.) Management strategies include daily or post-coital prophylaxis and self-start therapy for women concerned about developing a UTI when they are away from home, she added.

Dr. Brown said that he considers topical estrogen for postmenopausal women who have recurrent UTIs. ■

Shorter Antibiotic Course For Childhood UTI Possible

BY LINDA LITTLE
Contributing Writer

SCOTTSDALE, ARIZ. — The treatment and diagnosis of urinary tract infections in young children are undergoing dramatic changes, Aaron L. Friedman, M.D., said at a pediatric update sponsored by Phoenix Children's Hospital.

Urinary tract infections affect 3%-4% of

young girls and 1% of young boys—making the condition relatively common in children.

Dr. Friedman, chairman of the department of pediatrics at Brown University, Providence, R.I., said the standard treatment today is 7-14 days of antibiotics. However, there is now evidence that this could be shortened to 2-4 days for uncomplicated infections.

He pointed to a compilation of 10 studies of 652 children, aged 3 months to 18 years, comparing the conventional antibiotic course of 7-14 days with a 2- to 4-day treatment. The shorter course was found as effective as the longer course in eradicating lower urinary tract infections in children.

"There is increasing evidence that treatment as short as 2-4 days is sufficient for uncomplicated urinary tract infections in children who don't have bacteria floating in their blood and no kidney involvement," Dr. Friedman said.

Another change is the amount of work a physician should put into finding the cause of the urinary tract infection. Because of the fear of kidney damage due to ureterovesical reflux in young children, the dogma has been to order imaging studies, such as ultrasound and voiding cystourethrogram (VCUG), after the diagnosis.

Both imaging studies are conventionally done weeks after the diagnosis of urinary tract infection in young children, said Dr. Friedman.

Ultrasound is now considered of little value, and the utility of VCUG—especially in children older than 1 year—is under considerable review, he said.

This applies only to children aged 1 year and older, he said. "Infants should be examined aggressively, but for everyone else, there should be a more nuanced approach."

A U.S. study of more than 300 children with UTI aged 1-24 months showed that ultrasound was normal in 88% of children and that VCUG was positive for reflux in only 39%. Additionally, the nuclear medicine scan was positive for renal scarring in only 9.5% of patients.

"There is very little utility in ultrasound in urinary tract infections in children," he said. "It doesn't help in early treatment, and it doesn't give you any more information than what you had before."

There is increasing evidence about the use of VCUG with the first urinary tract infection, he said.

VCUG was thought to be useful in defining the population that needed prophylactic treatment. However, there is increasing skepticism such treatment is advantageous in these children.

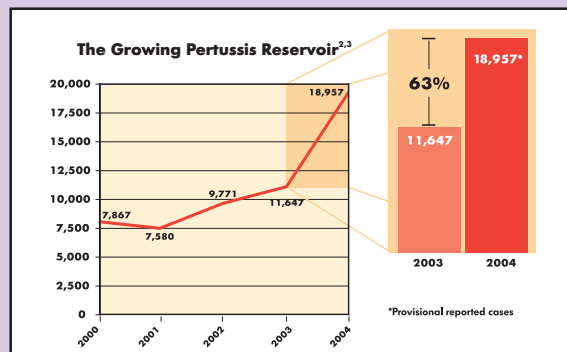
"The problem is that we don't know that prophylactic treatment with low-dose antibiotics for an 18-month to 2-year period is useful," he said. "While it does reduce the recurrences, there is no evidence that it improves the long-term outcome."

"We are in a continuum here, where the conventional approach recommended a voiding study," Dr. Friedman said. ■

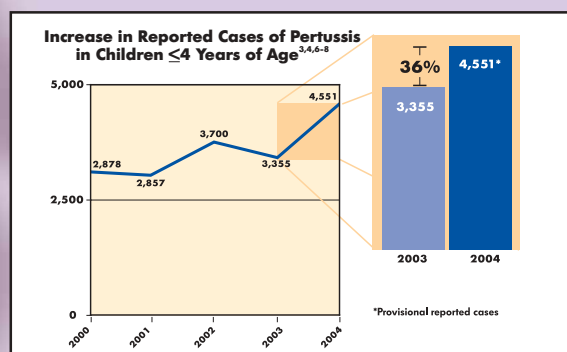
begins at home

The growing threat of pertussis — an often silent disease reservoir

Long thought to be nearly eradicated, pertussis case reports are at a 40-year high.² Today pertussis is the only communicable disease that is on the rise in all age groups for which a routine immunization is available. In 2004 there were 18,957 cases reported to the CDC, a 63% increase over 2003 and a startling 1000% increase from 20 years ago when incidence reached its nadir.^{2,3}



Especially troubling are two facts: first, there has been a 36% increase in reported cases among children ages 4 years or less^{3,4}; second, over the last decade, 80% of deaths attributed to pertussis occurred in infants under 6 months of age.⁵



Among the many explanations on the explosion of pertussis in the United States are better reporting, better diagnosis, and waning immunity. What they all have in common is the acknowledgment that there exists a reservoir of disease among adolescents and adults, and more importantly, from this reservoir pertussis transmission occurs. Pertussis is most contagious during

the first few weeks of illness before it is recognizable.⁹ In both adolescents and adults the disease is often mild in nature, and not associated with the trademark "whooping cough."^{9,10} However, studies have reported significant morbidity including pneumonia, rib fractures, urinary incontinence, weight loss, otitis media, and sinusitis.¹¹ People with pertussis are also at risk of hospitalization and other complications such as seizures and encephalopathy. Beyond the morbidity are the social, financial, and psychological costs of pertussis disease. One recent study reported that 70% of affected adolescents lost 5 to 10 days of school while 49% of afflicted adults were out of work for 5 to 10 days.¹¹ In addition, 49% of adults reported that their sleep was disturbed for more than 21 consecutive nights with 9% reporting disturbed sleep for an astounding 60+ nights.¹¹ It's no wonder the ancient Chinese called pertussis "the cough of 100 days."

Soon pertussis prevention will begin in the home too

Building on the heritage of the proven pediatric acellular DTaP vaccines, acellular Tdap vaccines for adolescents and adults will soon be available. This intervention will allow health-care providers to protect a broad spectrum of people from the morbidity of primary disease, as well as limit the morbidity and mortality in vulnerable infants by curtailing disease transmission.

You can find out more about pertussis by visiting any one of the following Web sites:

www.pertussis.com; www.cdc.gov;
www.nfid.org; www.napnap.org;
www.aap.org

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